Scout Report sent out		☑
Noted in the NID File	10	☑
Location map pinned		☑
Approval or Disapproval Letter		☑
Data Completed, P. & A. or operations suspended		
Pin changed on location map		☐
Affidavit and Record of A & P		☐
Water Shut-Off Test		☐
Gas-Oil Ratio Test		☐
Well Log Filed		☐

FILE NOTATIONS

Entered in N I D File	✓	Checked by Chief	✓
Entered On S R Sheet	✓	Copy N I D to Field Office	✓
Location Map Pinned	✓	Approval Letter	✓
Card Indexed	✓	Disapproval Letter	
I W R for State or Fee Land			

COMPLETION DATA:

Date Well Completed	12-17-58	Location Inspected	
OW	WW	TA	Bond released State of Fee Land
OW	OS	PA ✓	

LOGS FILED

Driller's Log 3-2-59

Electric Logs (No.) 3

E	I	E-I ✓	GR	GR-N	Micro ✓	
Lat	Mi-L	Sonic	Others			

Form 9-331 b
(April 1952)

Budget Bureau No. 42-R359.4.
Approval expires 12-31-60.

X			

(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Indian Agency Navajo

Allottee

Lease No. 14-20-603-404

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL	X	SUBSEQUENT REPORT OF WATER SHUT-OFF	
NOTICE OF INTENTION TO CHANGE PLANS		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF		SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO REDRILL OR REPAIR WELL		SUBSEQUENT REPORT OF REDRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE		SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING		SUPPLEMENTARY WELL HISTORY	
NOTICE OF INTENTION TO ABANDON WELL			

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

October 13, 1958

Desert Creek
Well No. 1 is located 660 ft. from ~~X~~N/S line and 660 ft. from ~~X~~E/W line of sec. 18

SW SW/4 Section 18 (¼ Sec. and Sec. No.) | 42-S (Twp.) | 23-E (Range) | Salt Lake (Meridian)

Wildcat (Field) | San Juan (County or Subdivision) | Utah (State or Territory)

The elevation of the derrick floor above sea level is 5337 ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

It is intended to drill a well through the Paradox Formation using rotary tools and mud circulation. Intermediate casing will be set in Chinle Formation if water flow is encountered. Production casing will be set through Paradox Formation. All possible producing zones will be acidized. Estimated total depth is 6700'.

Casing Program:

13-3/8" Surface Casing at 200' w/200 sks. circulated to surface.
9-5/8" Intermediate Casing at 1860' (if necessary) w/500 sks.
5-1/2" Production Casing at 6700' w/500 sks.

The SW/4 of Section 18 is dedicated to this well.

SW/4 Section 18 Navajo Tribal Contract No. 14-20-603-404.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company El Paso Natural Gas Products Company

Address Post Office Box 1565

Farmington, New Mexico

By ORIGINAL SIGNED BY: JOSEPH E. KREGER

Title Petroleum Engineer

U. S. GOVERNMENT PRINTING OFFICE 16—8437b-8

COMPANY El Paso Natural Gas Products Company

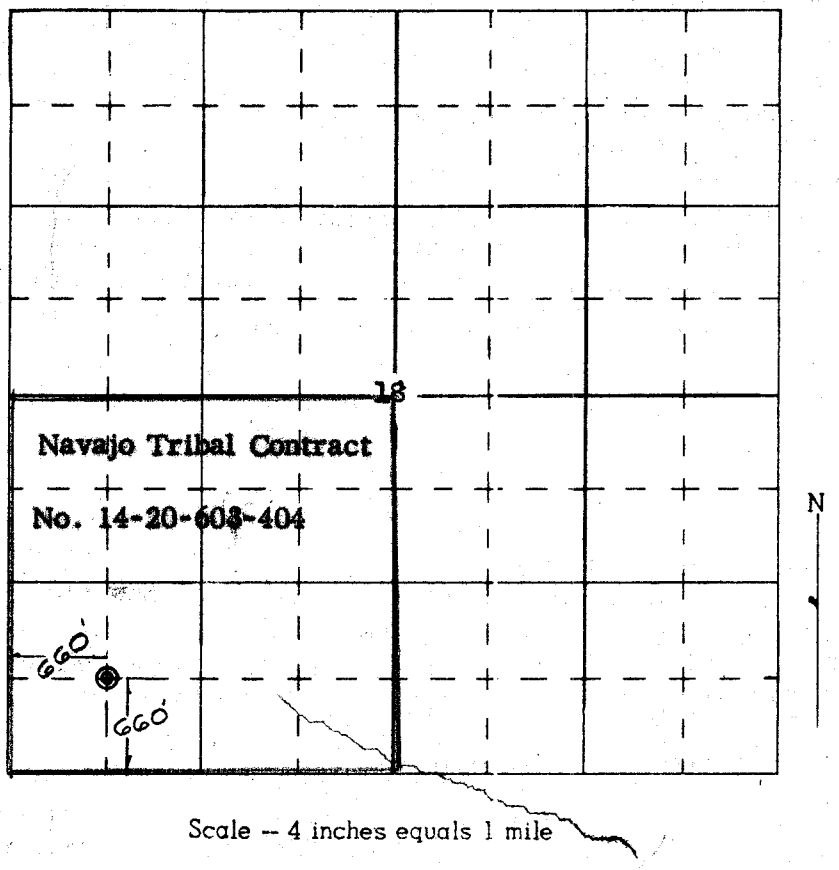
Well Name & No. Desert Creek No. 1 Lease No. Navajo 14-20-603-404

Location 660 feet from the South line and 660 feet from the West line,

Being in SW¼SW¼

Sec. 18, T. 42 S., R. 23 E., ~~NMPM~~, Salt Lake Meridian, San Juan County, Utah.

Ground Elevation 5327



Scale -- 4 inches equals 1 mile

Surveyed October 8, 1958

This is to certify that the above plat was prepared from field notes of actual surveys made by me or under my supervision and that the same are true and correct to the best of my knowledge and belief.

Ernest V. Echohawk

Ernest V. Echohawk
Registered Land Surveyor
N. M. Reg. #1545

REGISTERED LAND SURVEYOR STATE OF NEW MEXICO 1545 Seal ERNEST V. ECHOHAWK

Four States Oil Field Surveys
Farmington, New Mexico

October 16, 1958

El Paso Natural Gas Products
P. O. Box 1565
Farmington, New Mexico

Attention: Joseph E. Kreger, Petroleum Engineer

Gentlemen:

This is to acknowledge receipt of your notice of intention to drill Well No. Desert Creek 1, which is to be located 660 feet from the south line and 660 feet from the west line of Section 18, Township 42 South, Range 23 East, SLBM, San Juan County, Utah.

Please be advised that insofar as this office is concerned, approval to drill said well is hereby granted.

This approval terminates within 90 days if the above mentioned well is not spudded in within said period.

Yours very truly,

OIL & GAS CONSERVATION COMMISSION

CLEON B. FEIGHT
SECRETARY

CBF:co

cc: Phil McGrath
USGS, Farmington,
New Mexico

Budget Bureau No. 42-R359.4.
Approval expires 12-31-60.

Form 9-331 b
(April 1952)

X			

(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Indian Agency Navajo Tribal

Allottee

Lease No. 14-20-603-404
Desert Creek

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL		SUBSEQUENT REPORT OF WATER SHUT-OFF	X
NOTICE OF INTENTION TO CHANGE PLANS		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF		SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO REDRILL OR REPAIR WELL		SUBSEQUENT REPORT OF REDRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE		SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING		SUPPLEMENTARY WELL HISTORY	
NOTICE OF INTENTION TO ABANDON WELL			

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

FILED IN LIEU OF OGCC - Form 1.

October 22, 19 58

Well No. 1 is located 660 ft. from {N/S} line and 660 ft. from {E/W} line of sec. 18

SW SW/4 Section 18 (¼ Sec. and Sec. No.) | 42-S (Twp.) | 23-E (Range) | NMPM (Meridian)

Wildcat (Field) | San Juan (County or Subdivision) | Utah (State or Territory)

The elevation of the derrick floor above sea level is 5337 ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

Spud Date: 10-19-58. 10-20-58 Total Depth 210'.
Ran 7 joints 13-3/8", 48.00#, H-40 Csg. (196') set at 208' with 200 sacks regular cement, 3% Calcium Chloride circulated to surface.
Held 500#/30 Minutes.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company El Paso Natural Gas Products Company

Address Post Office Box 1565

Farmington, New Mexico

By Joseph E. Seger

Title Petroleum Engineer

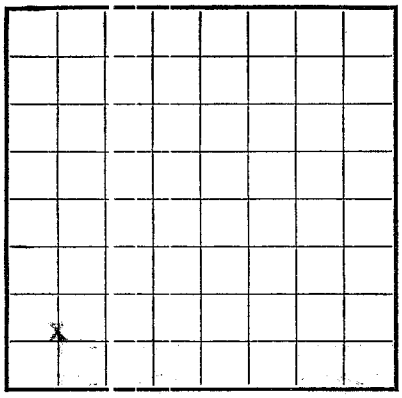
U. S. GOVERNMENT PRINTING OFFICE 16—8437b-8

W

Form 9-331

Bureau No. 42-R355.4.
Approval expires 12-31-60.

U. S. LAND OFFICE Navajo Tribal
SERIAL NUMBER 14-20-603-404
LEASE OR PERMIT TO PROSPECT



LOCATE WELL CORRECTLY

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

RECEIVED
MAR 2 1959

LOG OF OIL OR GAS WELL

Company El Paso Natural Gas Products Co. Address Box 1565, Farmington, New Mexico

Lessor or Tract Desert Creek Field Wildcat State Utah

Well No 1 Sec. 18 T. 42S R. 23E Meridian Salt Lake County San Juan

Location 660 ft. {N. / S.} of S Line and 660 ft. {E. / W.} of W Line of Section 18 Elevation 5337'
(Derrick floor relative to sea level)

The information given herewith is a complete and correct record of the well and all work done thereon so far as can be determined from all available records.

Signed ORIGINAL SIGNED BY: JOSEPH E. KREGER

Date February 27, 1959 Title Petroleum Engineer

The summary on this page is for the condition of the well at above date.

Commenced drilling October 19, 19 58 Finished drilling December 15, 19 58

OIL OR GAS SANDS OR ZONES

(*Denote gas by G*)

No. 1, from ____ to ____ No. 4, from ____ to ____

No. 2, from ____ to ____ No. 5, from ____ to ____

No. 3, from ____ to ____ No. 6, from ____ to ____

IMPORTANT WATER SANDS

No. 1, from ____ to ____ No. 3, from ____ to ____

No. 2, from ____ to ____ No. 4, from ____ to ____

CASING RECORD

Size casing	Weight per foot	Threads per inch	Make	Amount	Kind of shoe	Cut and pulled from	Perforated From—	Perforated To—	Purpose
13-3/8"	48.00	8 Rd.	H-40	195	Baker				Surf. Csg.

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
13-3/8"	207	200	Circulated		

PLUGS AND ADAPTERS

Heaving plug—Material ____ Length ____ Depth set ____

Adapters—Material ____ Size ____

SHOOTING RECORD

FOLD | MARK

13-3/8"	207	200	Circulated			

PLUGS AND ADAPTERS

Heaving plug—Material _____ Length _____ Depth set _____

Adapters—Material _____ Size _____

SHOOTING RECORD

Size	Shell used	Explosive used	Quantity	Date	Depth shot	Depth cleaned out

~~This well was plugged and abandoned December 17, 1958. Plugs set 0-15' with 15 sacks cement; 175-225' with 40 sacks cement; 720-820' with 40 sacks cement; 1640-1790' with 60 sacks cement; 4565-4765' with 80 sacks cement; set surface marker 4' above ground level.~~

TOOLS USED

Rotary tools were used from 0 feet to 6636 feet, and from _____ feet to _____ feet

Cable tools were used from _____ feet to _____ feet, and from _____ feet to _____ feet

DATES

_____, 19_____ ~~Put to producing~~ P & A 12-17-58, 19_____

The production for the first 24 hours was _____ barrels of fluid of which _____% was oil; _____% emulsion; _____% water; and _____% sediment. Gravity, °Bé. _____

If gas well, cu. ft. per 24 hours _____ Gallons gasoline per 1,000 cu. ft. of gas _____

Rock pressure, lbs. per sq. in. _____

EMPLOYEES

_____, Driller _____, Driller

_____, Driller _____, Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
0	325	325	Morrison Form. Inbd. gn. brn. & red waxy sh. & fn. to cse. gr. sd.
325	518	193	Bluff Member Form. Lt. orgnge to bf., FG, loosely consolidated, rdd. to sub rdd. gr., FQG ss.
518	583	65	Summerville Form. Reddish-brn., slt. sdy. to shy. siltstone & white fn. to med. gr. round poorly consolidated ss.
583	672	89	Entrada Form. White or orange, fn. to cse. gr. ss. red orange soft sltstn., red to brn. soft silty sh.
672	765	93	Carmel Form. Red to brn. soft well consolidated sh. & orange unconsolidated, v/fn. to cse. gr. clastic, sub-rdd. ss.
765	1050	285	Navajo Form. Red, buff, fn. gr. crossbedded ss.
1050	1100	50	Kayenta Form. Reddish purple ss, w/inbd. sns. & ls.
1100	1722	622	Wingate Form. Orange, v/fn. to med. gr., unconsolidated rd. to sub-rdd. ss & lk. orange, soft, sl/sdy. siltstone.
1722	2480	758	Chinle Form. Red to Red-brn. sft. sh. w/occ. thin beds of brn. & gy. ls.; cong. base.
2480	2532	52	Shinarump Form. Gy. & purple MG conglomerate ss. inbd. w/soft brn. & gn. shale.
2532	2605	73	Moen Kopi Form. Gy., brn., & purple soft sh. inbd. w/gy.-gn. FG ss.

(OVER) 16—43094-4

FORMATION RECORD—Continued

FROM—	TO—	TOTAL FEET	FORMATION
2605	2910	305	De Chelly Form. White & orange fn. to cse. gr. FQ ss.
2910	3620	710	Cutler Redbeds Form. Red brn. sft. slty. sh.
3620	4664	1044	Cutler Evaporites Form. Sh. & sltstn. soft anhydritic shale. Sh. & siltstone.
4664	5618	954	Honaker Trail Form. Gy. ls., Cherty ls zones, w/inbd. red gy. shales & sandstones.
5618	5955	337	Upper Paradox Form. Lt. gy. to blk. ds. to por., hd., micro to med. xlyn., ls. w/traces of blk. sh. laminations.
5955	6155	200	Middle Paradox Form. Predominantly gypsum or anhydrite w/thin to med. beds qtz. ds. ls. w/dk. gy./blk. shale interbeds.
6155	6471	316	Lower Paradox Form. Porous to ds. gy. to white ls. w/inbd. blk. shale.
6471	6624	153	Pinkerton Trail Form. Gy. ls., gy.-grn. shales, some siltstones & sandstones.
6624	6636	12	Molas Form. Red, grn., gy. sh. w/inbd. cream ls., red siltstones & sandstones.

TOPS ARE FROM ELECTRIC LOGS AND RADIOACTIVITY LOGS.

16—43094-2 U. S. GOVERNMENT PRINTING OFFICE

HISTORY OF OIL OR GAS WELL

It is of the greatest importance to have a complete history of the well. Please state in detail the dates of redrilling, together with the reasons for the work and its results. If there were any changes made in the casing, state fully, and if any casing was "sidetracked" or left in the well, give its size and location. If the well has been dynamited, give date, size, position, and number of shots. If plugs or bridges were put in to test for water, state kind of material used, position, and results of pumping or bailing.

CORES

Date	Section	Recovery
11-18-58	5774-5818	24' ls.; no fluor.
11-20-58	5818-5832	36' ls.; fluor.
11-23-58	5832-5835	11' dns. ls.
	5835-5851	2-1/2' dns. ls.
	5851-5868	9' dns. ls.
11-25-58	5868-5879	10' ls; sl. fluor.
11-26-58	6155-6205	10-1/2' dns. ls.
12-3-58	6205-6217	55' dolo.
	6217-6245	12-1/2' dolo.
12-4-58	6245-6266	23-1/2' dolo.
12-5-58	6266-6280	21' dolo.
12-6-58	6339-6358	13-1/2' dolo.
12-8-58	6358-6370	19' dns. ls.
	6370-6399	8' dolo. & dns. ls.
12-9-58	6399-6419	29-1/2' dolo.
12-10-58	6419-6434	14' dns. ls. & dolo
12-11-58		

DRILL STEM TESTS

11-21-58	5785-5818	Open 2'10" WBAI, Died 1' 3"	Complete in drill pipe.
11-22-58	5732-5818	Open 57" WBAI, Died 53"	120' O-M
11-28-58	5829-5930	Open 48" WBAI, Died 5"	90' O-M
12-2-58	5943-6155	Open 49", WBAI, Died 10"	60' O-M
12-16-58	6436-6537	Open 120", SBA thruout	3300' Sulphur Water
12-16-58	6190-6215	Open 120" SBA thruout	1085'
12-16-58	5665-5730	Open 120" SBA thruout	O-M-XM - 2370'

POOR OIL OR GAS WELL.

GEOLOGICAL SURVEY

DEPARTMENT OF THE INTERIOR

UNITED STATES

LEASE OR PERMIT TO PROSPECT

SERIAL NUMBER

U. S. LAND OFFICE

FORM 9-330

April 1, 1959

El Paso Natural Gas Products Company
Post Office Box 1565
Farmington, New Mexico

Attention: Joseph E. Kreger
Petroleum Engineer

Gentlemen:

Re: Well No. Desert Creek 1
Section 18, Township 42 South
Range 23 East, San Juan Co.

It has come to the attention of this office that this well was plugged and abandoned December 18, 1958. According to the rules and regulations of this Commission, a monthly well status report should be filed with us. The last such report was received by this office on October 22, 1958.

Also, it is required that all logs, electric, driller's, etc., be filed in this office within three months after completion of a well. If our information is correct and the well was plugged and abandoned December 18, 1958, we should have received your logs not later than March 18, 1959.

We would appreciate your prompt attention to this matter.

Yours very truly,
OIL & GAS CONSERVATION COMMISSION

C. Peterson
Statistician

cp

Box 183

EL PASO NATURAL GAS PRODUCTS COMPANY
Desert Creek #1
18-42S-23E 10351

Core #6, 5851 1/2-5868', recovered 10':
1 1/2' limestone, dark grey-black, micro-crystalline, dense, shaly with shale stringers, few micro-fractures;
4' limestone, as above, slight odor, dead oil fluorescence on micro-fractures;
1' limestone, as above, no odor or fluorescence;
1' limestone, as above, with calcite filled micro-fractures and seams;
1' limestone, dark grey, fine crystalline, hard, few shale stringers, trace of pinpoint porosity, odor, trace of bleeding oil;
1' limestone, as above, fine to medium crystalline, slight odor, trace of fluorescence, no bleeding;
1 1/2' limestone, as above, trace of pinpoint porosity, fluorescence, trace of bleeding oil, few [illegible] fossils;
6 1/2' no recovery.

Core #7, 5868-79', recovered 10 1/2':
2' limestone, dark grey-black, micro to fine crystalline, dense, shaly, fossiliferous, slight odor, oil fluorescence on micro-fractures;
4' limestone, dark grey, fine crystalline, dense, shaly with shale stringers, grades to calcareous shale 73-74';
2' shale, black with calcareous inclusions, with shaly limestone laminae;
2' limestone, grey, medium crystalline, hard, slight inter-granular porosity, abundant calcite crystals;
1/2' limestone, grey, fine crystalline, dolomitic, trace of porosity;
1/2' no recovery.

Core #8, 6155-6205', recovered 50':
5' dolomite, dark grey, fine crystalline, hard, dense, few small anhydrite inclusions and very thin shale streaks;
3' dolomite, as above, shaly;
1' dolomite, as above, very shaly, grading to dolomitic shale;
4' dolomite, as above, few anhydrite inclusions and shale partings;
1' dolomite, as above, shaly;
5' dolomite, as above, few anhydrite inclusions and shale partings;
1' dolomite, light grey to tan, crypto-crystalline, dense, slight mineral fluorescence;
1' dolomite, as above, abundant anhydrite inclusions, slight pinpoint porosity, bleeding salt water, micro-fractures, slight mineral fluorescence;
4' dolomite, tan, fine-medium crystalline, anhydrite inclusions, slight pinpoint porosity, bleeding salt water, micro-fractures, slight mineral fluorescence;
3' dolomite, tan-light grey, fine-medium crystalline, hard, dense;
3' dolomite, as above, slight pinpoint porosity, bleeding salt water, slight mineral fluorescence;
4' dolomite, brown, fine-coarse crystalline, hard, dense;
3' dolomite, tan-grey, fine crystalline, sucrosic, slight porosity and bleeding salt water in top 2';
1' shale, black, hard, dolomitic, with thin dolomite streaks;
1' dolomite, grey, fine crystalline, hard, dense;
3' dolomite, brown, grey, fine crystalline, sucrosic, slight porosity, bleeding salt water, anhydrite inclusions in top 1';
7' dolomite, light grey, fine crystalline, sucrosic, anhydrite inclusions in top 3', slight pinpoint porosity and bleeding salt water in top 2' and bottom 2'.

Cor: #9, 6205-6217 1/2', recovered 12 1/2':
3' dolomite, grey to tan, fine crystalline, vuggy porosity, anhydrite inclusions, micro-fractures, styolites, bleeding salt water;
2' dolomite, as above, dense, tight, shale streaks;
1' dolomite, grey to tan, fine crystalline, small vuggy porosity, micro-fractures, slightly bleeding salt water;
1' dolomite, as above, hard, tight, fossiliferous, grading to limestone;
2' limestone, grey to brown, fine crystalline, hard, tight, dolomitic, fossiliferous, grading to dolomitic at bottom;
3 1/2' dolomite, grey, micro-crystalline, hard, dense, tight, with shale streaks, grading to shale at bottom.

Cor: #10, 6217 1/2-6245', recovered 23 1/2':
5 1/2' dolomite, hard, dense;
1' dolomite, porous, bleeding salt water;
1' dolomite, hard, dense;
4 1/2' dolomite, porous, bleeding salt water;
1' dolomite, hard, dense;
4 1/2' dolomite, porous, bleeding salt water;
3' dolomite, hard, dense;
3' dolomite, porous, bleeding salt water;
4' no recovery.

Cor: #11, 6245-6266', recovered 21':
9' dolomite, grey to tan, fine to medium crystalline, vuggy porosity, bleeding salt water, anhydrite inclusions, random micro-fractures, few fossils;
3' dolomite, as above, trace of vuggy porosity, slightly bleeding salt water;
2' dolomite, grey to tan, fine to medium crystalline, hard and tight, anhydrite inclusions, fossiliferous;
2' dolomite, as above, grey chert, few fossils;
1' dolomite, as above, no chert;
2' dolomite, grey, fine crystalline, hard and tight, abundant fossils with fossiliferous trash;
2' limestone, grey to tan, fine to coarse crystalline, [redacted] tight, very fossiliferous becoming dolomitic.

Cor: #12, 6266-80', recovered 13.5':
11' dolomite, grey to brown, micro-medium crystalline, hard, dense, tight, small chert (6268-70'), anhydrite inclusions, styolites, micro-fractures;
1' shale, dark grey, calcitic, dolomitic at bottom;
1' dolomite, as above;
1/2' dolomite, brown, fine crystalline, small vuggy porosity, bleeding salt water;
1/2' no recovery.

Cor: #13, 6339-6358', recovered 19':
1' shale, dark grey to grey-green, slightly calcareous, slightly silty;
3' limestone, dark grey, micro-fine crystalline, hard, tight, silty, shaly with shale streaks;
1' shale, as above, with calcite laminae;
6' limestone, as above, with shale stringers and interbeds;
4' limestone, dark grey to grey-green, micro-fine crystalline, slightly dolomitic, slightly shaly, micro-fractures, trace of porosity (vuggy, pinpoint, and intra-crystalline);
4' dolomite, brown, tan medium crystalline, hard, tight, few shale interbeds, micro-fractures, anhydrite inclusions, anhydrite beds in bottom 1'.

Core #14, 6358-6370', recovered 8':
4' dolomite, brown to grey, fine-medium crystalline, hard, tight, shaly, streaks, anhydrite inclusions, micro-fractures;
3' dolomite, as above, medium down to fine-crystalline;
1' limestone, dark grey, micro-fine crystalline, hard, tight, slightly shaly, micro-fractures;
4' no recovery.

Core #15, 6370-99', recovered 29':
2' shale, dark grey-black, slightly calcareous;
3' dolomite, light grey, medium crystalline, hard and tight, few specks of gluconite;
4' dolomite, grey to tan, fine to medium crystalline, hard and tight, slightly shaly, few micro-fractures;
1' dolomite, as above, anhydrite inclusions, bleeding salt water from micro-fractures, trace of vuggy porosity;
1 1/2' dolomite and interbedded black shale;
1 1/2' dolomite, brown to grey, fine to medium crystalline, trace of vuggy porosity, bleeding salt water from micro-fractures;
3' dolomite, as above, fair vuggy porosity, bleeding salt water;
1' dolomite, as above, no bleeding;
5' dolomite, grey, fine to medium crystalline, hard and tight, abundant anhydrite inclusions, micro-fractures;
3' dolomite, light grey, medium crystalline, hard and tight, anhydrite inclusions;
1' dolomite, grey to brown, fine to medium crystalline, hard and tight, few crinoids;
3' limestone, dark grey, fine crystalline, hard and tight, dolomitic, fossiliferous.

Core #16, 6399-6419', recovered 20':
4' limestone, medium to crypto-crystalline, hard and tight, fossiliferous;
1' shale, dark grey, calcareous with limestone streaks;
3' limestone, grey, fine crystalline, hard and tight, with few shale streaks;
1' limestone, grey to tan, crypto crystalline, hard and tight, fossiliferous;
2' shale, dark grey to black, calcareous with streaks of fossils trash limestone;
9' limestone, grey to brown, fine to medium crystalline, crypto-crystalline, at bottom 2', with micro-fractures and abundant chert.